

Amendments to the Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) An industrial control system for controlling an industrial process comprising:

a plurality of I/O devices capable of exchanging signals with the industrial process;

a web access module including a web server coupled to a programmable logic control (PLC), wherein the web server is capable of being coupled to at least one remote device via the Internet, and wherein the PLC is coupled to the I/O devices to execute a controller program to control the industrial process using the signals;

wherein the web access module further includes program development software including application programming software that can be utilized to generate or modify a the controller program for at least one of the PLC and one of the I/O devices, and

wherein the web server is capable of providing the program development software programming software onto the Internet for transmission to the remote device, so that the remote device is able to generate or modify the controller program.

2. (original) The industrial control system of claim 1, wherein the PLC and the web server are one of: (a) implemented in a single computer executing two programs; and (b) implemented respectively in two different computers that are in communication via a communication link.

3. (currently amended) The industrial control system of claim 1, wherein the PLC executes the controller program, once the remote device has generated the controller program using the application programming software and the controller program has been returned to the web access module from the remote device.

4. (previously presented) The industrial control system of claim 1, wherein the program development software is stored within at least one of the PLC, the web server, a memory device within the web access module, a memory device within at least one of the I/O devices and a remote memory device.

5. (original) The industrial control system of claim 4, wherein an existing controller program is stored within at least one of the PLC, the web server, a memory device within the web access module, a memory device within at least one of the I/O devices and a remote memory device.

6. (currently amended) The industrial control system of claim 5, wherein the web server is capable of sending the existing controller program along with the application programming software to the remote device by way of the Internet, so that the remote device is able to modify the existing controller program to generate the controller program.

7. (original) The industrial control system of claim 6, wherein it is allowable for the remote device to remotely store a backup copy of the controller program generated based upon the existing controller program.

8. (currently amended) The industrial control system of claim 6, wherein the program development software includes a plurality of versions of application programming software, and wherein the existing controller program and a plurality of additional existing controller programs are stored in association with the respective versions of the application programming software that were employed to generate the respective existing controller programs.

9. (currently amended) The industrial control system of claim 6, wherein the program development application programming software that is sent along with the existing controller program is of a version that was used to generate the existing controller program.

10. (original) The industrial control system of claim 1, wherein the web server is coupled to the Internet by way of an Internet interface, and wherein the PLC is coupled to the I/O devices by way of a control network interface.

11. (previously presented) The industrial control system of claim 1, wherein the web server provides the program development software to the remote device in response to a request received from the remote device.

12. (previously presented) The industrial control system of claim 1, wherein the web server provides onto the Internet, in response to a request received from the remote device, information indicative of another Internet-accessible location at which the remote device can obtain desired program development software.

13. (previously presented) The industrial control system of claim 1 wherein, prior to the sending of the program development software to the remote device, the web access interface must receive a signal indicative of at least one of a payment agreement and a credit card number from the remote device.

14. (currently amended) The industrial control system of claim 13, wherein the signal must be received only when the program development software to be sent is a new version of the application programming software that has not earlier been communicated to the remote device.

15. (currently amended) In an industrial control system having a plurality of control devices that operate to monitor and control an industrial process, a web access module coupled to the plurality of control devices, the web access module comprising:

a memory means for storing program development software including application programming software utilized to generate a controller program for operation on at least one of the web access module and one of the control devices; and

a processor means coupled to the memory means, the processor means for sending the program development software to a remote device and receiving communications concerning the controller program from the remote device, wherein the controller program is generated at the remote device through the use of application software included with the program development software,

wherein the web access module is further adapted to allow for communications between the processor means and the remote device by way of the Internet.

16. (currently amended) The web access module of claim 15, wherein the processor means includes a web server and a PLC, and wherein an existing controller program is stored by the memory means in association with a particular version of the program development application programming software.

17 . (original) The web access module of claim 16, wherein the control devices are selected from the group consisting of I/O modules, motor controllers, and PLCs.

18. (currently amended) A method of generating a controller program for at least one control device of an industrial control system that monitors and controls an industrial process, the method comprising:

providing a web server within the industrial control system, wherein the web server is capable of communicating with at least one remote device via the Internet; obtaining program development software including application programming software capable of being used to generate the controller program;

providing the program development software onto the Internet for transmission to the at least one remote device; and
receiving from the at least one remote device the generated controller program.

19 . (currently amended) The method of claim 18, further comprising: obtaining an existing controller program from a memory device on which the existing controller program is stored, the program development software being associated with the existing controller program;

providing the existing controller program onto the Internet for transmission to the at least one remote device; and

after receiving the generated controller program from the at least one remote device, storing the generated controller program on the memory device in association with a version of the application programming software that was utilized to generate that controller program.

20. (original) The method of claim 19, wherein the web server and a PLC are included within a web access module, wherein the PLC is coupled to a plurality of additional control devices within the industrial control system, and wherein the controller program is utilized by at least one of the PLC and one of the additional control devices.--